



February 20, 2008

James Baldwin
Illinois Environmental Protection Agency
Voluntary Site Remediation Program
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject: **Response to November 19, 2007 and January 10, 2008 Correspondence**
LPC# 0311715101 – Cook County
Village of Lyons / Quarry Reclamation District TIF #4
Lyons, Illinois
BB&J Project No. 0259004

Dear Mr. Baldwin:

Bradburne, Briller & Johnson, LLC (BB&J), on behalf of the Village of Lyons c/o Robert Bush, is providing this response to your request for information submitted via Illinois Environmental Protection Agency (IEPA), Site Remediation Program (SRP) letters dated November 19, 2007 (November 19, 2007 Letter) and January 10, 2008 (January 10, 2008 Letter) to Mr. Robert Bush of Ancel Glink regarding the Village of Lyons property located in Cook County, Lyons, Illinois (Subject Property).

Please find BB&J's response to your comments below, matched numerically to your comments:

November 19, 2007 Letter

1. As indicated in BB&J's *Work Plan for Additional Soil and Ground-water Investigation*, dated October 22, 2007 (Work Plan), BB&J proposed to explore the Subject Property using soil probes, soil borings, and monitoring wells to address potential constituents of concern (COCs). BB&J completed this investigation in December 2007 and will submit a report with findings to the IEPA SRP shortly. During the December 2007 investigation, twenty-three soil probes were advanced to 12 feet below ground surface (bgs) to assess the upper-most fill material at the Subject Property. These soil probes were primarily advanced throughout the central portion of the Subject Property to assess ingestion and inhalation exposure pathways, and were not intended to reach bedrock.

To investigate the soil horizon from the ground surface to the top of bedrock, BB&J advanced soil borings and monitoring wells to the overburden soil/fill material – bedrock interface. To date, no monitoring wells have been installed into the bedrock; however, an Addendum to the Work Plan has been submitted to the IEPA SRP which includes a scope of work to investigate the bedrock beneath the Subject Property.

2. Based upon previous investigations, including the December 2007 investigation, there is one water-bearing unit in the overburden soil/fill material outside of the horizontal extent of the former quarry; this unit has been encountered at depths ranging from approximately 10 to 20 feet

bgs. The monitoring well completed in the soil/fill material of the former quarry (SIR MW-4 located in the central portion of the Subject Property) indicated that the depth to ground-water was approximately 50 to 70 feet bgs. The soil boring for this monitoring well was advanced to approximately 96 feet bgs, where drilling refusal/top of rock was encountered. As described in the previously submitted Addendum to the Work Plan, monitoring wells will be completed into bedrock at the Subject Property.

3. As indicated in the Work Plan, BB&J collected soil samples from three different depths in soil borings located at the Subject Property. Additionally, as will be addressed in the forthcoming Addendum to the Work Plan, BB&J will collect soil samples from various depths from each soil boring.
4. To date, BB&J has used direct-push technology (i.e., Geoprobe®) in addition to hollow stem augers (HSA) to investigate the subsurface of the Subject Property. As was addressed in the previously submitted Addendum to the Work Plan, both of these types of drilling methods will be used, in addition to using rotary drilling (if necessary) and rock coring techniques.

January 10, 2008 Letter

1. Per the open leaking underground storage tank (LUST) incident #931154 at the historic asphalt plant, BB&J requests to proceed with the LUST incident under the SRP. The signed Election for Proceed Under the SRP form is attached as Appendix A.
2. Soil samples associated with LUST incident #931154 were collected by Alpha Environmental, Inc. (AE), as described in *Environmental Remediation Report & Monitoring Plan at Palumbo Bros. Inc. Lyons Asphalt Plant*, prepared by AE, for Palumbo Bros., Inc., dated December 7, 1993 (AE Report). In Section 2.2 of BB&J's Comprehensive Site Investigation Report (CSIR), as well as in Sections 1.0, 2.1.1, and 4.1, BB&J describes a release of diesel fuel from an underground pipe that connected to a diesel aboveground storage tank (AST).

According to the AE Report, approximately 50 cubic yards of diesel-impacted soil surrounding the underground pipe, diesel AST, and footings of the historic asphalt plant were excavated from an area approximately 16 feet wide by 20 feet long and disposed off site. Four soil samples collected from the sidewalls of the excavation (identified as W-1N, W-1S, W-1E, and W-1W) and one composite soil sample collected from the floor of the excavation (identified as F-1) were submitted for laboratory analysis of the following:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (USEPA) Method 8020 (modified); and,
- Polynuclear aromatic hydrocarbons (PAHs) by USEPA Method 8310.

Based upon BB&J's review of the analytical laboratory reports and associated figure of AE sample locations included within the AE Report, concentrations of naphthalene exceeded remediation objectives (ROs) for the construction worker inhalation exposure pathway. Furthermore, based upon a review of concentrations of xylene compared to the most recent IEPA TACO ROs, xylene exceeds the construction worker inhalation exposure pathway. A figure of AE's sampling locations and a summary table of the analytical results is attached as Appendix B. This exceedance of naphthalene was not intended to be correlated to or associated with soil boring SB-7 completed during BB&J's Phase II ESA: Commercial Development, dated

June 13, 2007. The reference to naphthalene by BB&J was only intended to communicate the findings of AE's investigation because as of BB&J's CSIR, no subsurface investigation had been completed by BB&J for this area.

Because the figures in the AE Report do not include a scale and this area of the Subject Property has since been vacated, the excavation area and the sampling locations are not precisely known. However, based upon aerial photographs described in BB&J's CSIR and a review of several general figures in the AE Report, the location of the historical asphalt plant and associated diesel-impacted soil is limited to the northwest and north-central portions of the Subject Property. Furthermore, based on these aerial photographs and the AE Report, it does not appear that the concentrations of naphthalene identified in soil boring SB-7 is related to the work addressed in the AE Report regarding the historical asphalt plant.

During the December 2007 investigation, BB&J completed four soil probes from within the approximate boundaries of the historic asphalt plant. Sampling locations and analytical results will be included within a report under separate cover.

3. As previously described in the Work Plan, several monitoring wells were installed during the December 2007 investigation. Additionally, as discussed in the previously submitted Addendum to the Work Plan, additional monitoring wells, including bedrock wells, are proposed at the Subject Property to assist in characterizing the ground-water at the Subject Property.
4. BB&J will reevaluate the ground-water conditions at the Subject Property following the installation and sampling of additional monitoring wells per the previously submitted Addendum to the Work Plan.
5. Following installation of the additional monitoring wells at the Subject Property, BB&J will issue a revised potentiometric map of the ground-water flow and gradient of the water bearing unit in both the overburden fill material and the bedrock.
6. Following installation of the additional monitoring wells at the Subject Property, BB&J will prepare revised hydrogeological information with regard to whether or not the possibility of off-site migration exists.
7. A Remediation Objectives Report (ROR) will be submitted under separate cover to address the potential need for engineered barriers, vapor barrier membranes, and/or passive vent systems at the Subject Property.
8. BB&J understands the request for additional soil and ground-water sampling within the area of the historical asphalt plant. Details of this additional sampling were provided in the f previously submitted Addendum to the Work Plan.

BB&J, on behalf of the Village of Lyons, submits this information to the IEPA SRP in order to clarify outstanding issues pertaining to BB&J's CSIR and Work Plan. As previously mentioned, anticipated reports and work plans to be submitted to the IEPA SRP include, but are not limited to:

- Reports of Additional Investigations;
- ROR;
- Remediation Action Plan (RAP); and,
- Remediation Action Completion Report (RACR).

BB&J would be happy to meet with the IEPA SRP to discuss any of the above information at your convenience. If you have any questions or concerns about this response, please feel free to contact Messrs. Kevin McCartney or Andrew Bajorat of BB&J at (312) 726-8556.

Sincerely,

BRADBURNE, BRILLER & JOHNSON, LLC



Kevin McCartney
Project Manager



Andrew Bajorat, CHMM
Senior Scientist



J. Tim Bradburne, P.G.
Principal

Cc: Robert Bush, Ancel Glink

*Enclosures: Appendix A – IEPA LUST Program Election to Proceed under the SRP
Appendix B – AE Report Figures and Tables*

APPENDIX A

IEPA LUST PROGRAM – ELECTION TO PROCEED UNDER THE SRP

The Illinois EPA is authorized to require this information under Title XVII of the Environmental Protection Act (415 ILCS 5/58.1(e)(2)). Failure to disclose this information may prevent this form from being processed and could also prevent acceptance into the Site Remediation Program. This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency
Leaking Underground Storage Tank Program
Election to Proceed under the Site Remediation Program**

(This form applies only to UST owners or operators electing to conduct remediation under SRP.)

A. SITE IDENTIFICATION

IEMA Incident # (6- or 8-digit): _____ IEPA LPC# (10-digit): _____

Site Name: _____

Site Address (Not a P.O. Box): _____

City: _____ County: _____ ZIP Code: _____

B. CERTIFICATION

In accordance with Section 58.1(b) of the Environmental Protection Act (Act) (415 ILCS 5/58.1(b)), the following statement of election is made:

As the Owner and/or Operator of this tank system, I am electing to proceed with remediation in accordance with Title XVII of the Act (415 ILCS 5/58 et seq.) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 740. I am aware of the following:

- *Completion of the Site Remediation Program (SRP) Application and Service Agreement Form (DRM-1) is required to enroll into the Program.*
- *I am subject to an advance partial payment for requested services in the amount of \$500. Alternatively, I may request that the Illinois Environmental Protection Agency (Illinois EPA) estimate the total costs to provide the requested services and assess an advance partial payment not to exceed \$5,000 or one-half of the total anticipated costs of the Illinois EPA, whichever is less. If the second option is selected, the Assessment of Advance Partial Payment for Anticipated Services Application (DRM-3) must be completed and attached to the application and service agreement.*
- *The advance partial payment is not refundable.*
- *I am subject to payments for costs incurred by the Illinois EPA for the performance of services under the SRP once the advance partial payment has been depleted. In addition, a No Further Remediation (NFR) letter assessment fee is required based on Illinois EPA-incurred costs up to a maximum of \$2,500.*
- *I am no longer eligible to seek reimbursement from the Underground Storage Tank Fund for costs incurred after the date the SRP Application and Service Agreement Form (DRM-1) is signed by the Remediation Applicant and accepted by the Illinois EPA.*
- *I am subject to the report requirements of 35 Ill. Adm. Code 740, which include, but are not limited to, submitting a Site Investigation Report, Remediation Objectives Report, Remedial Action Plan, and Remedial Action Completion Report.*
- *All plans and reports submitted for review and evaluation must be prepared by, or under the supervision of, an Illinois Licensed Professional Engineer, except that, for a site investigation report only, an Illinois Licensed Professional Geologist may make the certification. Any plan or report submitted to the Illinois EPA for review and evaluation must be accompanied by Form DRM-2.*

- An NFR Letter issued pursuant to Section 57.10 of the Act (Leaking UST Program) signifies that all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with; whereas, an NFR Letter issued pursuant to Section 58.10 of the Act (SRP) signifies a release from further responsibilities under the Act in performing the approved remedial action and shall be considered prima facie evidence that the site does not constitute a threat to human health and the environment. The NFR Letter issued pursuant to Section 58.10 of the Act may not address all recognized environmental conditions or contaminants of concern subject to LUST regulations. Therefore, the content of the NFR Letter issued pursuant to Section 58.10 of the Act may reflect that fact.
- I am responsible for any environmental conditions or contaminants of concern associated with a Leaking UST release not addressed in the NFR Letter issued pursuant to Section 58.10 of the Act, including, but not limited to, off-site soil and/or groundwater contamination.
- If I am also the Remediation Applicant under the SRP, I further agree that any NFR Letter issued pursuant to Section 58.10 of the Act is voidable by the Illinois EPA if I fail to address such conditions or contaminants as required by law.

C. SIGNATURES**UST Owner**

Company: Village of Lyons
Contact: Robert K. Bush - City
Address: 140 S. Dearborn #600
City: Chicago, IL
State: Ill.
ZIP: 60603
Phone: 312-782-7606
Signature: [Signature]
Date: Feb. 19, 2008

UST Operator (if different than UST Owner)

Company: _____
Contact: _____
Address: _____
City: _____
State: _____
ZIP: _____
Phone: _____
Signature: _____
Date: _____

Submit this form to:

Illinois Environmental Protection Agency
Bureau of Land -- #24
Leaking Underground Storage Tank Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

APPENDIX B
AE REPORT FIGURES AND TABLES

FIGURE 1
Portion of the USGS Quadrangle Map

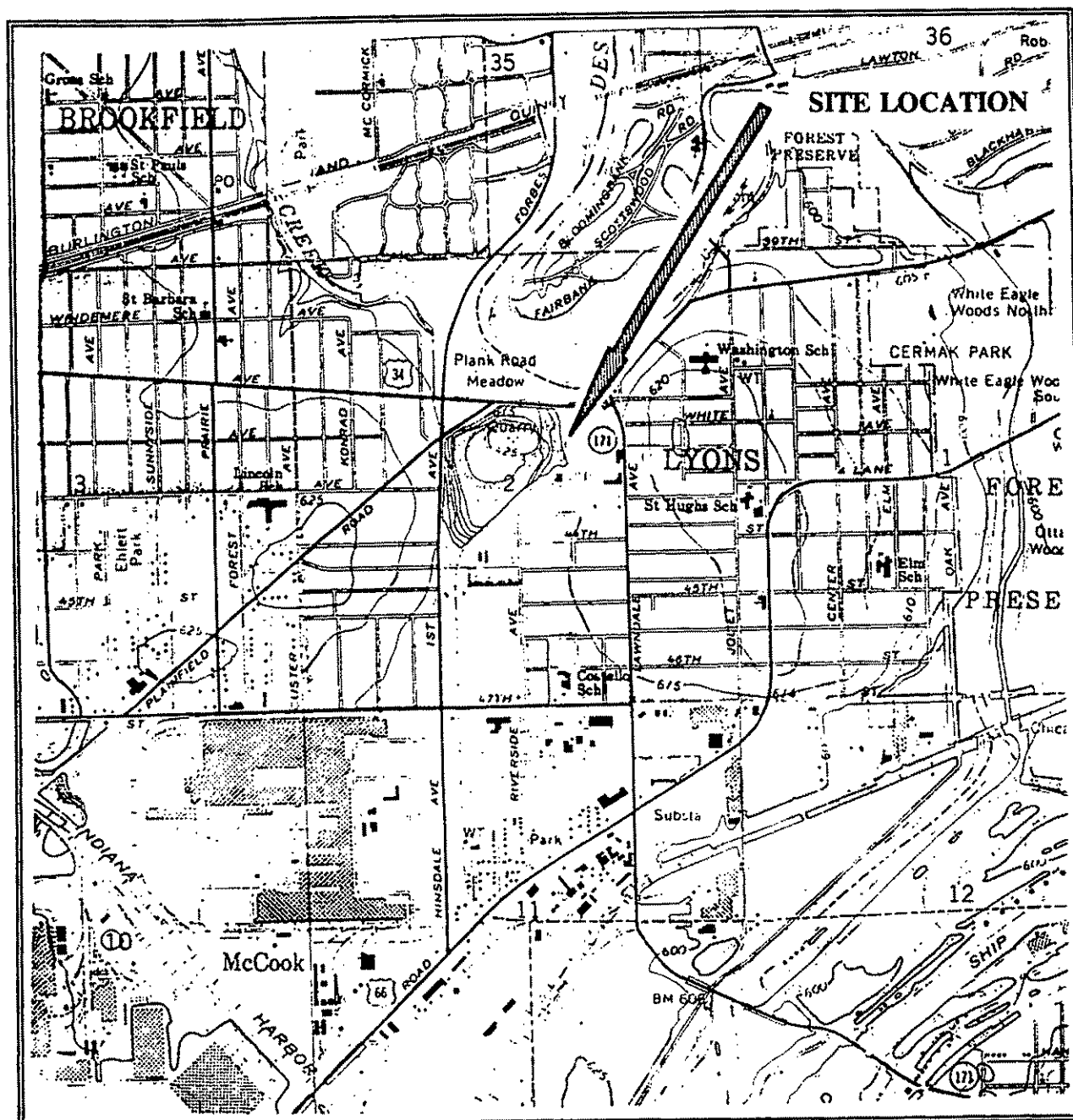


FIGURE 1
PORTION OF USGS RIVERSIDE QUAD MAP
SHOWING THE PALUMBO BROS. ASPHALT PLANT
LYONS, ILLINOIS

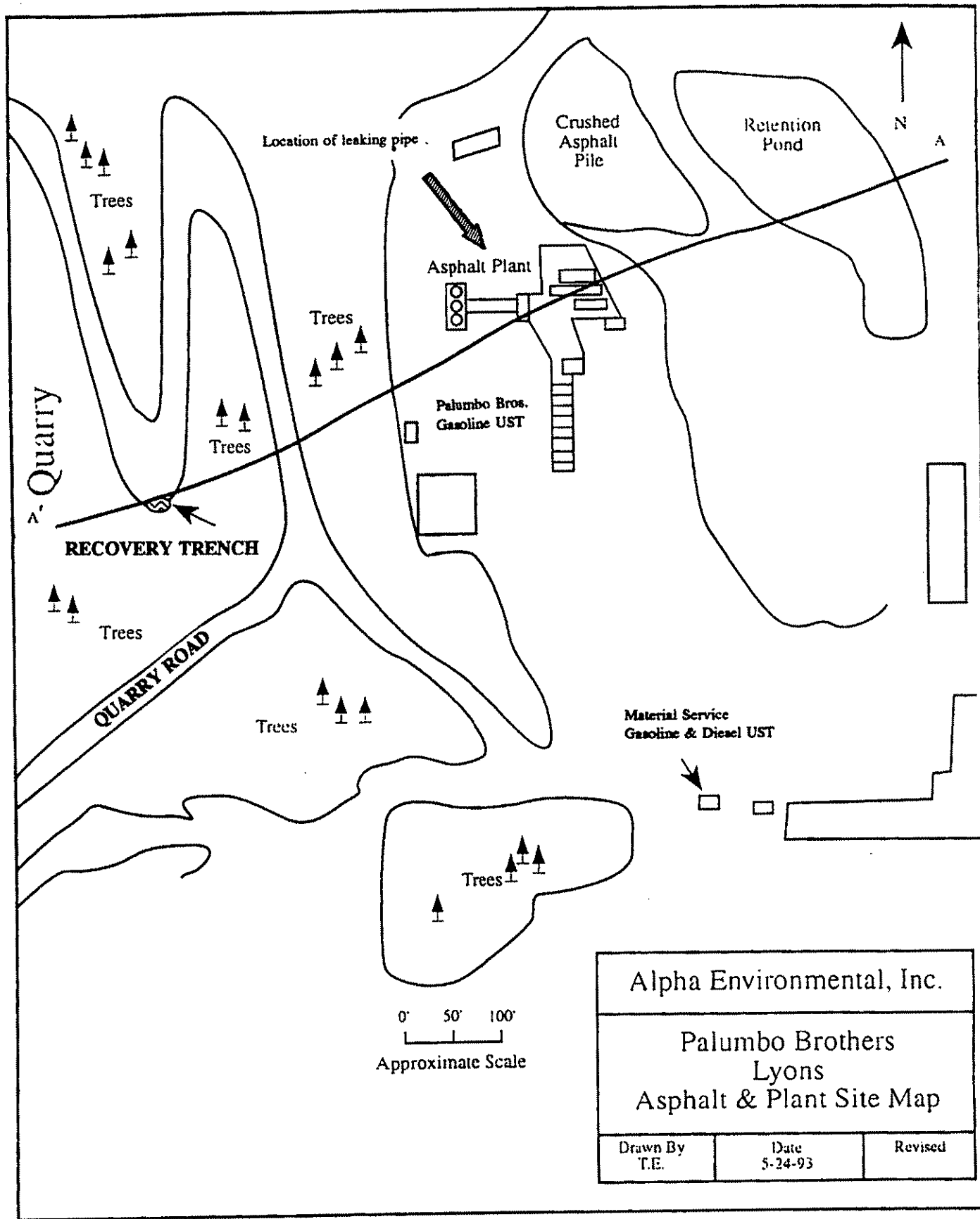


FIGURE 2

Palumbo Bros. Asphalt Plant

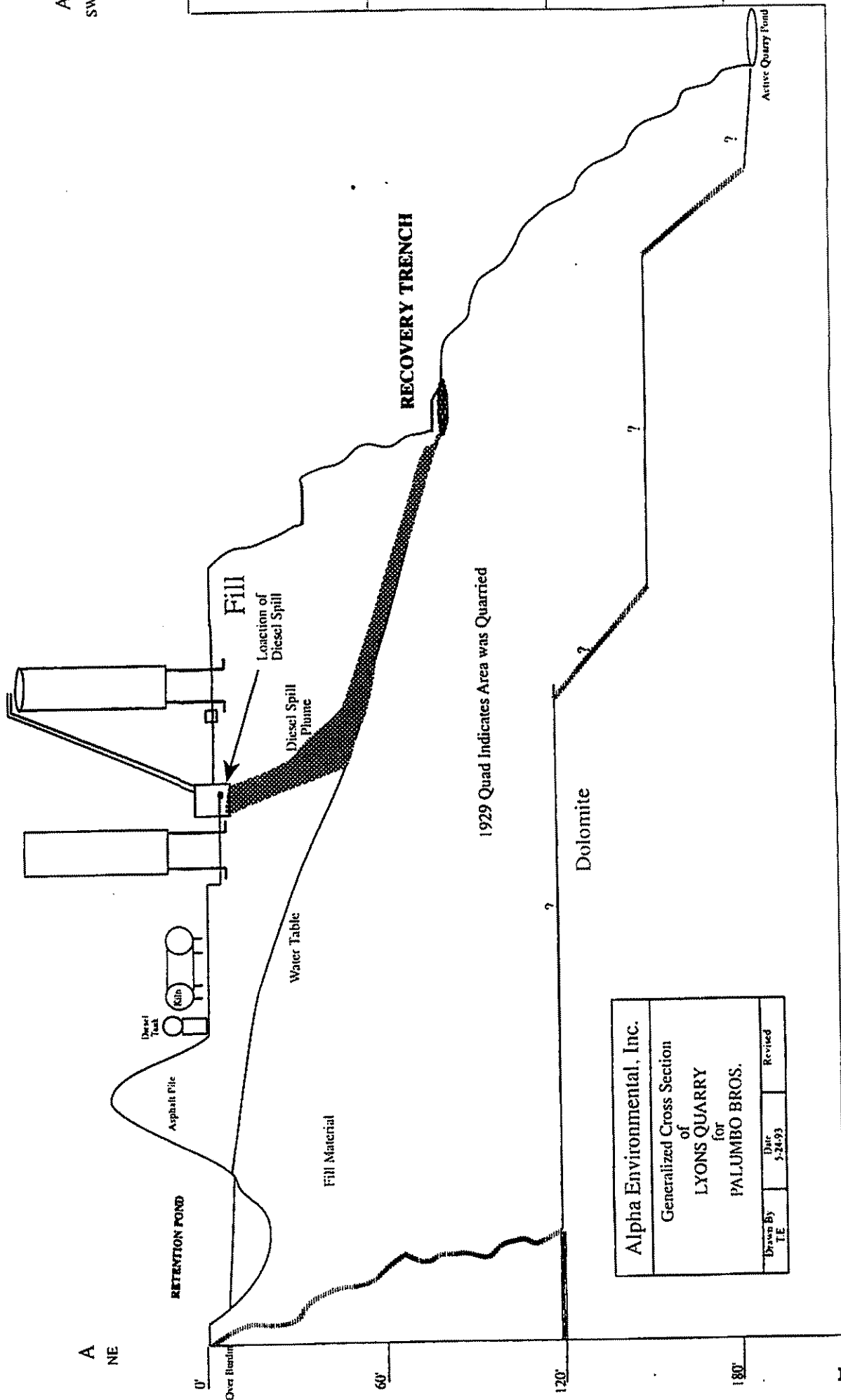


FIGURE 3

Sample	F-1	W-1N	W-1S	W-1E	W-1W	Acceptable Detection Limit
Description	COMP	GRAB	GRAB	GRAB	GRAB	
BTEX						
Benzene	BDL	.089	BDL	BDL	BDL	.00009
Toluene	1.6	.095	BDL	1.7	.071	.0001
Ethylbenzene	5.5	0.67	0.80	12.0	0.21	.00005
Xylene	12	1.3	1.1	39.0	0.70	0.002
B+E+T+X (TOTAL)	19	2.2	1.9	53.0	0.98	
PNAs						
Acenaphthene	BDL	BDL	1.6	4.1	BDL	0.66
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	0.66
Anthracene	BDL	BDL	BDL	BDL	BDL	0.66
Benzo(a)anthracene	0.78	.022	0.32	0.41	0.92	.0087
Benzo(a)pyrene	0.51	.023	.079	BDL	1.2	.015
Benzo(b)fluoranthene	0.56	BDL	BDL	BDL	1.1	.012
Benzo(g,h,i)perylene	BDL	BDL	BDL	BDL	0.35	0.66
Benzo(k)fluoranthene	0.38	.027	BDL	BDL	0.65	.011
Chrysene	0.73	BDL	BDL	0.62	1.2	.1
Dibenzo(a,h)anthracene	0.11	.021	BDL	0.13	BDL	.02
Fluoranthene	5.0	BDL	14	32	2.6	.014
Fluorene	BDL	BDL	2.4	7.3	BDL	.014
Indeno(1,2,3,- c,d)pyrene	0.78	BDL	BDL	BDL	1.1	.0029
Naphthalene	1.9	BDL	BDL	13	BDL	.0006
Phenanthrene	1.5	BDL	5.0	16	BDL	0.66
Pyrene	1.6	BDL	1.2	2.3	1.3	0.18
Other Non-Car. PNAs	1.5	BDL	5.0	16	0.35	NA

TABLE 1
SOIL SAMPLES - LABORATORY RESULTS (expressed in ppm)

Laboratory: Great Lakes Analytical

BDL - below detection limit

BTEX analyses method:

Shading denotes concentrations above LUST Standards

SW-846, 8020 (modified) and 8310

concrete support pillars

foundation footings

3/4" diesel line

W-1S

AREA OF EXCAVATION

W-1W

pin hole in diesel line

F-1

W-1E

W-1N

AREA OF EXCAVATION

3/4" diesel line

Alpha Environmental, Inc.

ORANGE CRUSH RECYCLE CO.

LYONS ASPHALT PLANT

SOIL EXCAVATION MAP

T. ENHO

6/16/93

FIGURE 4

● SOIL SAMPLE



scale